WATER AND SANITATION PROGRAM: **TECHNICAL PAPER**

The Power of Primary Schools to Change and Sustain Handwashing with Soap among Children:

The Cases of Vietnam and Peru

Pennelope Dutton, Rocio Florez Peschiera and Nga Kim Nguyen

September 2011

wsp
water and
sanitation program

The Water and Sanitation Program is a multidonor partnership administered by the World Bank to support poor people in obtaining affordable, safe, and sustainable access to water and sanitation services.

THE WORLD BANK

Acknowledgments:
This document was written by Pennelope Dutton, World Bank's Consultant, Rocio Florez Peschiera, Peru's Handwashing Initiative Coordinator and Nga Kim Nguyen, Vietnam's Handwashing Initiative Coordinator with contributions from Almud Weitz, WSP Regional Team Leader for East Asia and Glenn Pearce Oroz, WSP Regional Team Leader for Latin America and the Caribbean. It was peer reviewed by Eduardo Perez and Jacqueline Devine, both World Bank's Senior Water and Sanitation Specialists.

Layout:
Shinny Montes

First edition: September 2011
Print run: 500 copies

Lima, Peru

www.wsp.org
wsp@worldbank.org

Contents

Executive summary

In Vietnam and Peru, handwashing initiatives within the primary school setting, are increasing students' handwashing with soap rates by using entertainment education approaches. The initiatives were supported by the Water and Sanitation Program (WSP) through the Global Scaling Up Handwashing Project. In Vietnam, the Women's Union facilitated the training of 1,200 headmasters and teachers who carried out handwashing activities in over 600 schools in 15 provinces across the country. In total, over 340,000 students were reached. In Peru, the Handwashing Initiative was mainstreamed into the Ministry of Education's system, through the Safe, Clean and Healthy Schools Program that was implemented in 24 regions and trained 14,000 teachers who worked with 285,000 students.

Although both countries based their program development on a common framework under the Global Handwashing Scaling Up Project, their implementation strategies were markedly different. The need for formative research insights that would help drive the design of the programs was a key lesson from those programs. One relevant finding common to both countries was the fact that children already understood the value of washing hands to combat germs. That was a platform used in building the programs. Research in Vietnam revealed that children had very little free time and that teachers were already overburdened with a heavy curriculum. Therefore, the entertainment education approach was used to develop games and activities as extracurricular activities that would complement rather than compete with the existing curriculum. In Peru, the curriculum became the entry point for the program, particularly because the Education Ministry was ready to improve the national hygiene curriculum though policy development and regulations.

In both countries, the formative research sought to understand whether the children could act as agents of change in their households and schools. In Vietnam, the ideal child was docile and submissive and unlikely to be able to influence adults. Children could, however, influence their siblings. Therefore, in Vietnam the program focus was on handwashing with soap to prevent others from getting sick. In Peru, children in most areas were motivated to "help" their families to overcome certain burdens to come out of poverty. Children are therefore, motivated to influence their elders, to the program focused on their ability to became agents of change and some messages asked of them to remind their mothers to wash their hands with soap before cooking. Both programs utilized fun and games with a superhero character that used soap to help others. However, the messaging and mechanisms for relaying messages differed according to the results of the research.

The fact that teachers needed incentives was also a key lesson. In Peru, teachers were overburdened with activities and capacity-building sessions. Teachers needed to perceive a concrete benefit from additional commitments. Linking the HWI program to performance indicators and recognizing progress by means of certifications, proved to be effective because it translated in increases in teachers' salary rates. In Vietnam, equipping teachers with a different approach to hygiene promotion and giving them simple tools that they could immediately integrate into their lessons proved to be an invaluable incentive.

In both countries, a key aspect of the programs was the capacity to be a bridge between the school and the home and to link children to the larger community. In Vietnam's caretakers program, grandparents received messages on the importance of washing their own hands at key times. They also received guidance on how to play games with their grandchildren to help reinforce handwashing with soap messages delivered in schools. In both countries, mass media helped to link children to the larger community. In the case of Vietnam, it reinforced the school-based handwashing activities through national television programs, publications, and drawing contests. In Peru's case, radio campaigns were supported by interpersonal programs carried out in schools and elsewhere in each district where the project was implemented.

Both case studies also offered suggestions on how to integrate handwashing with soap to increase its occurrence rate, by partnering with other actors in the water, sanitation and health sector or by mainstreaming handwashing with soap into education systems through policy, regulation and rewards. Regardless of the approach taken, both country case studies demonstrated that getting more children to wash their hands with soap was achievable.

Project impact evaluation analyses in both countries are currently underway and the lessons provided in the present document are based on monitoring analysis of the behavioral change process in primary schools over the 2008 to 2010 period. Growing demand by national and local authorities to continue, scale up and further integrate approaches and tools developed by the project will lead to additional learning. These lessons should provide useful insights for governments, practitioners (including teachers and educators), NGOs and donors, who are interested in implementing a handwashing program in primary schools.

Introduction

Vietnam and Peru are two of four countries taking part in the WSP Global Scaling up Handwashing Project.[1] Funded by the Bill and Melinda Gates Foundation, the Global Scaling Up Handwashing Project aims to expand handwashing practices among women of reproductive age (15-49 years) and primary school-aged children (5 to 12 in Peru; 6 to 10 in Vietnam) The Project focuses on applying innovative promotional approaches to generate widespread and sustained improvement in handwashing with soap practice. Started in December 2006, the project is implemented by local and national governments with technical support from WSP, and participation from the private sector and non-governmental organizations.

The Global Scaling Up Handwashing Project aims to show which methods to stimulate and sustain behavior change at scale work and have an impact on health. The purpose of this working paper is to share that knowledge, by presenting two case studies about changing the handwashing behavior of primary school children—in Vietnam and Peru. Although the programs operate in different country contexts, and use different approaches to achieve behavior change, the common and the unique experiences of these two countries provide lessons for others. Similarities include child-focused research undertaken to understand the barriers to handwashing with soap, the use of entertainment education, and the need to build teachers' skills and tools to effectively publicize handwashing with soap. Differences are due to the social and geographical contexts of each country, the leadership role taken by government, the cultural differences of children as agents of change, the degree of interaction between parents and schools, and the education systems themselves.

Childhood is acknowledged as the best time to adopt new behaviors. After the family, schools are potentially very important places for learning new behaviors. Schools can provide a stimulating environment to learn about handwashing and other hygiene behaviors, and they can initiate change, with teachers and other students acting as stable role models. Children are potential agents of change within their families and community. By sharing information from school with the family, questioning existing practices at home, and influencing the behavior of siblings in their care, children can change their own behavior and that of others. Both Peru and Vietnam have high primary school enrolment ratios.[2] It was therefore appropriate to focus efforts to increase handwashing with soap by primary school-aged children on the primary school setting. Within this setting, efforts included learning about and practicing handwashing with soap.

The case studies focused on primary school children, though they were one component of a wider handwashing with soap implementation campaign. Both countries had already promoted handwashing for other target groups. Complementary community programs targeting women—often the mothers and caretakers of those same school children—were implemented concurrently with the schools program. Direct consumer contact and mass media activities and the interpersonal communication of the schools program were carried out simultaneously, and reinforced the change in knowledge, attitudes, and practices of primary school children. WSP provided a common framework, a standard approach and tools to assist the project implementation in both Peru and Vietnam. One such tool was the framework called "FOAM" (Focus, Opportunity, Ability, Motivation), developed by WSP as a common conceptual framework for all four countries taking part in the Global Scaling Up Handwashing Project. FOAM provided a way to analyze handwashing behaviors in order to design effective handwashing programs.

The present document describes the approaches to changing children's handwashing with soap behavior, first in Vietnam, then Peru, followed by some lessons learned and conclusions.

1 The two other countries participating in this initiative are Senegal and Tanzania.
2 Primary school enrolment ratios are 83% for Vietnam and 96% for Peru.

I. Vietnam

Background

VIETNAM COUNTRY DATA	
Area:	331,210 km2
Population:	89.6 million (2010)
Administrative regions:	58 provinces and 5 municipalities
Children aged 0-14 years:	26.1%
Under 5 mortality:	14 per 1000 (2008)
Primary school enrolment:	93%
Education expenditure:	5.3% GDP (2008)

Source: CIA World Factbook, 2010
UNICEF Vietnam at a Glance

Country Information

Vietnam has a highly centralized system of government in which the Communist Party plays a pivotal role in all aspects of politics, the economy and society. The country has some 54 ethnic minority groups, but the dominant culture in Vietnam is that of the Kinh, which makes up 85 percent of the population. The Kinh is a homogeneous social and ethnic group, whose language—Vietnamese—is the official language of the country. Some regional variations of geography and climate exist between northern, central and southern Vietnam. Primary education is free and mandatory from age 6 to 11.

The Importance of Handwashing

Acute respiratory infections are still the leading cause of mortality and morbidity in children under five in Vietnam. Malnutrition is still high relative to other Asian countries, with one third of Vietnamese children moderately or severely underweight, and children aged from 6 to 24 months at high risk of malnutrition.[3] The country has also suffered from recurring outbreaks of Severe Acute Respiratory Syndrome, Avian Flu, Cholera, and H1N1. These emerging diseases have increased the authorities' awareness that improved hygiene was critical to preventing and containing serious outbreaks.

Baseline research showed that handwashing with soap was not a common practice in Vietnam. Soap products, although readily available for most households, were used for handwashing only when hands appeared dirty or were smelly. A study conducted by WSP to understand the barriers and motivations for handwashing with soap among caretakers in 2006 revealed that:

- percent of caretakers washed their hands with soap before feeding a child;
- percent of caretakers reported washing their hands at critical junctures—but only with water;
- percent of caretakers who washed their hands did not feel that soap was important or necessary.

Although personal hygiene was part of the school curricula, physical barriers to handwashing with soap existed, including, in many cases, no designated areas for handwashing, insufficient water and soap, and inadequate or broken toilet facilities. Where handwashing and hygiene promotion had been included in water and sanitation programs, promotional activities were usually not researched and developed to specifically target primary school children.

Handwashing with Soap Program, its History, Components and Partners

The Overall Program

The Vietnam Handwashing Initiative (HWI) began in January 2006 and aimed to reduce morbidity and mortality from diarrheal diseases in children less than five years of age. The HWI developed and implemented two communications components; one for caretakers of children under five and one for primary school children aged 6 to 10. The initiative was supported by the Ministry of Health (MoH) and Ministry of Education and Training (MoET); the Vietnam Women's Union (VWU) was the main implementing partner.

The HWI was divided into two phases. The first (2008) involved piloting the HWI in 40 communes in eight provinces to change the behavior of mothers and caretakers. Mass media campaigns and interpersonal communication delivered by trained motivators (primarily village health workers, village leaders, teachers, and Vietnam Women's Union members), targeted mothers to motivate them to prioritize handwashing with soap, to help them understand how best to manage soap and water and to improve their understanding of both the health benefits of handwashing with soap and the critical times[4] to practice it. The MoH led in developing, training, and overseeing the interpersonal communication activities.

3 http://www.wpro.who.int/vietnam/sites/dhp/nutrition/
4 Before preparing food, before feeding children, after using the latrine and after cleaning a baby's bottom.

Primary Implementation Partner: The Vietnam Women's Union

The Vietnam Women's Union (VWU) is a mass organization—one of several political and social institutions established by the government as a way to communicate down to the grassroots level about national government programs and initiatives. The VWU's objective is to promote gender equity, foster the development of women, and protect the rights of Vietnamese women. It has more than 13 million members, and shares the same vertical structure as a line ministry, operating at central, provincial, district, and commune levels.

The VWU receives funding from the Government of Vietnam and external agencies such as UNICEF and the World Bank, as well as from its members. The presence and structure of mass organizations such as the WU in Vietnam gave the HWI a unique opportunity to reach millions of women and children with face-to-face communications activities.

The second phase (2008-2010) improved and scaled up the HWI, expanding it to target children of primary school age. The MoET participated in the development of the materials and endorsed all print and media materials. Behavior change campaigns targeting mothers/caretakers and primary school children followed a similar process of development:

1 Researching the audience;
2 Developing a behavior change framework to analyze research findings, guide the formation of the communication campaign and track changes in behavioral determinants throughout the life of the project;
3 Developing the creative approach including messages and tactics;
4 Pre-testing and adjusting the messages based on audience feedback;
5 Producing materials and rolling out of the activities; and
6 Monitoring and making informed adjustments to the program.

Handwashing with Soap in Schools

The development of the children's component began with research in rural and peri-urban schools in July 2008. Implementation of the component itself began in August 2009 at the beginning of the school year, and it ended in May 2010. Since then, over 1,200 teachers from 600 schools in 15 provinces throughout the country have carried out activities involving over 340,000 students.

Formative Research

The Global Handwashing Scaling Up Project encourages the development of innovative effective approaches to handwashing promotion. Unlike previous hygiene initiatives in Vietnam, the HWI undertook in-depth research of children's handwashing behavior in order to understand what influenced their behavior and design appropriate campaigns based on the research findings.

WSP commissioned an independent team of international and local consultants to carry out field research to learn about lives of primary school children and the school and home context where handwashing promotion will take place. Gaining an insight into the minds and realities of primary school children would help to better understand the barriers and motivations to washing hands with soap. The research also sought to understand the larger context of the children's world, including social dynamics, roles and responsibilities of teachers, a typical day in the life of a child (during the school term and holiday time), and their access to water, sanitation and soap.

Aware of the difficulties of obtaining information from very young children, WSP focused the research on children from grades four and five (9-10 years old), although younger children (grades 2-3) were included in one research exercise.

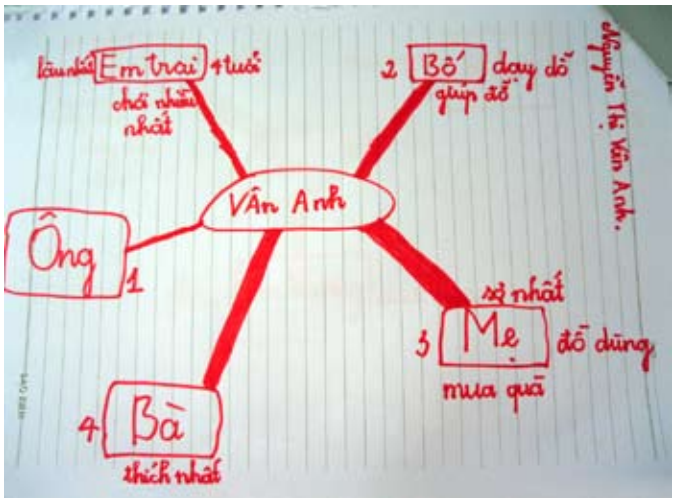
Location	Rural	Peri-urban
Northern	●	●
Central	●	●
Southern	●	●

Types of schools participating in the formative research

Six primary schools, chosen from three provinces to represent northern, central, and southern regions of Vietnam, took part in the formative research.[5] Each province included one peri-urban and one rural school.

Research tools included games and fun activities to encourage the children's active participation and interest (See Box 1). A total of 30 students (boys and girls), divided into groups of about five students from each school, used each of the research tools, with the exception of the Motivator Pictures exercise—story telling based on pictures about handwashing—where younger children joined in. Eighteen students took part in the Belief Interviews that were followed up with observations of sanitation and handwashing facilities in their homes and interviews with their caretakers.

Formative research helped identify opportunities for after school points of contact with children. Studying the daily schedule, researchers were able to find out if children played together in the school yard after school, or whether there was an opportunity for contact at night through mass media. When children indicated they watched television, researchers prompted them for more information about what shows they watched and why.



Family structure diagram: the thick lines show the child's strongest relationships and influences at home— in this case with Mother (Mẹ) who is feared the most but who also buys them presents, followed by the Grandmother (Bà), who the child likes the most.

5 WSP staff and local authorities chose schools that were representative of sanitation situations, were accessible and willing to participate in the research.

BOX 1: TOOLS FOR RESEARCHING CHILDREN'S HANDWASHING BEHAVIOR—VIETNAM

Research Tool	Why was it used?	How it was used?
Children's research activities		
Role Models	To understand who children look up to, why, and what children want to be as adults. To integrate these characteristics into handwashing messages.	Children write down their favourite role models, the reasons for their admiration, and the careers they wanted. Pile sorting and voting were used to find group agreement.
Track-the-Message	To understand transmission of information between school and home, and explore the potential for schools to serve as agents of hygiene promotion in the community-at-large	Teachers communicate a special message about tooth-brushing to their Grade 5 students. Students and their mothers are visited at their home the following day to see if the caretaker received the message, and if so, in what form.
Daily Diary	To understand how children spend their time in a typical day.	As a group exercise, children fill in clocks to show how they spend their time each hour of the day. Daily diaries are developed for both school days and summer holidays.
Motivator Picture	To understand the emotional drivers for washing hands such as disgust, morality, shame, regret.	Various handwashing scenes are presented to children and they are asked to tell a story based on how they interpret the pictures.
Family Structure	To understand the social relationships within the child's household, and the influences and constraints on handwashing.	The child draws a diagram of their family (showing themselves at the centre) and draws lines to the person in the home they are closest to, spend the most time with, and fear most.
Belief Interview	To understand children's beliefs about handwashing; to check if a 'seeded' message reached the child, and in what form.	Individual student interviews on topics including the benefits to washing hands with soap, and the causes of diarrhoea.
School Hygiene Facilities Observation	To observe the use, quality, number and condition of the school's sanitation and hygiene facilities.	Researchers complete a checklist on the numbers of toilets and urinals, taps, basins, staff and students (by gender), and presence of soap.
School Staff Interview	To understand the school's organization, including teacher workloads, roles and responsibilities, and the connections between the school and home	In-depth interviews and focus group discussions with headmasters and teachers.
Caretaker Interview	To understand primary caretakers' economic concerns about handwashing, the support for handwashing at home, and whether the 'seeded' hygiene message reached family members	Individual interviews of caretakers at home.
Home Observation	To understand access and availability of water and soap at home.	Direct observations of water, sanitation and hygiene facilities in homes, using a checklist.

Research Findings

The Larger School Context

Rural Vietnam's school setting presented unique challenges to effective promotion of handwashing with soap. The time when children were most likely to wash their hands in school was after using the latrine, not before eating, as almost all rural schoolchildren return home to eat their midday meal. Only a few schools offer children the possibility of remaining in school for lunch.

Children wanted to go to school because of its friendly environment; they did not find rules strict and felt very safe there. However, the days were long and highly structured with limited opportunities for play.

The school principal decided on school activities, and directed and supported teachers. Teachers had a full teaching load and no time to introduce new activities. Primary schools had to strictly follow the curriculum issued by the MoET. Under pressure, teachers tended to focus on core subjects such as Vietnamese and mathematics and disregarded auxiliary subjects such as physical exercise, the arts and personal hygiene. Handwashing with soap instruction was often only theoretical, as the lack of soap (and water and sanitation facilities) prevented children from washing their hands with soap at school.

Personal Barriers to and Motivations for Handwashing with Soap

Research showed that school children liked the smell of soap and knew that they needed to wash their hands with soap. They understood the relationship between germs and disease and the role of washing hands with soap in protecting their health and preventing the spread of diseases like diarrhea, bellyaches, and the flu.

Laziness, forgetfulness, lack of time or of desire to take time for washing, competing priorities such as playing football, and not seeing their friends wash their hands were all factors that limited children's handwashing. Like Vietnamese adults, children did not feel that washing hands was important or necessary unless their hands smelled or were clearly dirty.

> Children want to protect their younger brothers and sisters from getting sick. Regret at making someone ill from not cleaning dirty hands is the primary motivator for hand washing with soap.

The desire to prevent others, especially their younger siblings, from getting sick, motivated children to wash their hands. Belonging to the Ho Chi Minh Young Pioneers Organization was desirable because of its status and of its interesting extracurricular activities. Children used television as a window to the wider society, and their role models reflect greater societal values, such as education, hard work and altruism.

Ability to Influence Others at Home

At home, children's voices were "small" (although it was "bigger" for boys). Parents had a high degree of control over their children; urban mothers had the most influence, and rural fathers gave advice. The main role in teaching/educating children belonged to the parent who spent the most time at home, but the father was the final decision maker in educating children. Grandparents also had an important role in children's lives as they often played with them or looked after them while the parents worked. Older children felt protective towards their younger siblings and could guide their behavior. Children's influence on caregivers was not strong, especially in rural areas, as the image of a "model" child is one who was docile and submissive.

Handwashing with soap was important because of its low priority at home. Adults did not consider handwashing with soap a priority and did little to encourage their children to wash their hands with soap or to reinforce the practice.

FOAM Framework and FOAM-EM for School Program

The WSP-developed FOAM[6] framework for the Global Scaling Up Handwashing Project provided a way to analyze the determinants, or factors, that can improve or hinder handwashing with soap behavior (access to soap, beliefs regarding the cause of diarrhea, social norms and product attributes, etc.).

In Vietnam, the FOAM framework was adapted to target primary school children. This variation, called FOAM-EM (Focus on Ability, Opportunity, and Motivation—Ecological Model), used the findings of an innovative research study conducted in Vietnam with technical support by the London School of Hygiene and Tropical Medicine.[7]

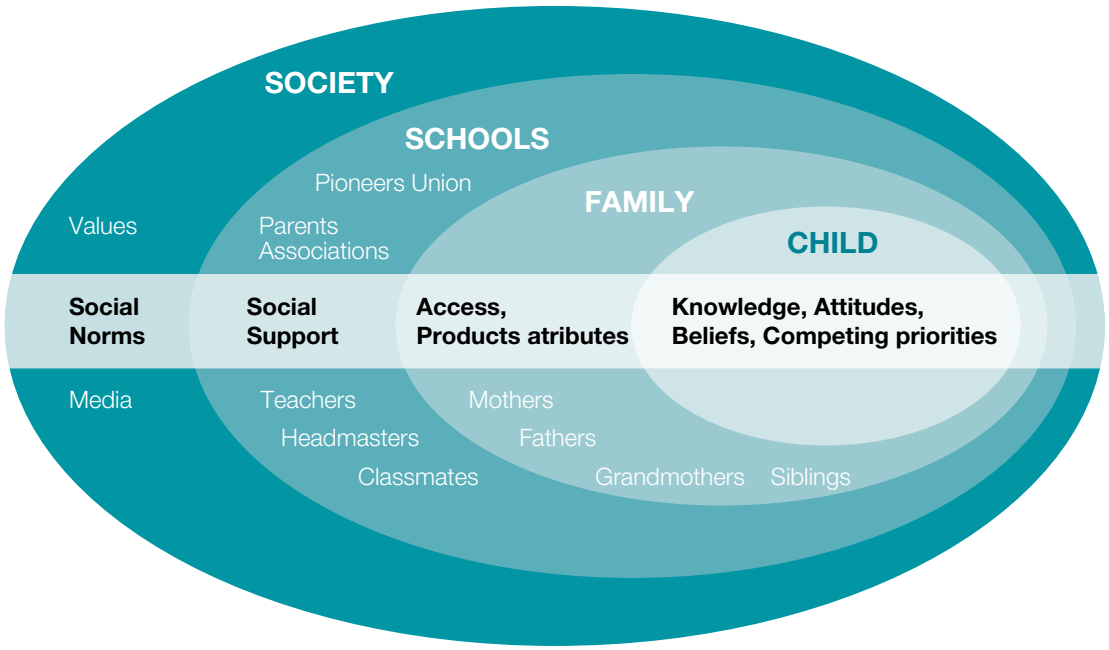
In Vietnamese, "em" means "little brother or sister," so FOAM-EM was a memorable acronym. FOAM-EM identified key factors influencing primary school children's handwashing behavior and their relationships with family, school, and community.

The objectives of the communication campaign emerged from the analysis of the findings from research using this FOAM-EM framework.

After the campaign, children in semi-urban and rural school ages 6-10 will:

- Know that even clean-looking and clean-smelling hands can carry germs;
- Believe that handwashing with water alone is not enough—soap is needed;

FIGURE 1. FOAM - ECOLOGICAL MODEL



6 FOAM was prepared for use by the four countries in the Global Scaling Up Handwashing Project. FOAM stands for:
Focus: who are target audiences and what is the behavior we want them to adopt?
Opportunity: is the target audience able to carry out the behavior?
Ability: is the target audience capable of carrying out the behavior?
Motivation: does the target audience want to carry out the behavior?

7 The true term is social ecological but EM is adopted for ease of use and relevancy.

- Believe that handwashing with soap in front of friends and family is an important to demonstration because good handwashing will protect themselves, their family and friends;
- Be motivated to wash their hands with soap at two critical times (before eating and after using the latrine); and
- Be motivated and feel excited about handwashing with soap and want to practice it.

Intervention

Design

The handwashing with soap campaign for primary school children was developed directly from the key findings of the formative research. The campaign approach derived from the analysis of the findings' implications.

The campaign used a fresh interactive approach by combining school education, through games and songs, with national mass media campaigns targeting children. Since television represented Vietnamese children's window on the outside world, WSP supported an advertising agency in developing an entertainment education program that combined mass media and interpersonal communications to generate interest in and enthusiasm for washing hands with soap and to promote that practice. The program, which focused on colorful, attractive and positive characters, was developed around a superhero who acquired special powers by handwashing with soap in order to help his family and others. The rural-schoolboy-turned-superhero story was broadcasted on several channels identified as being important to children. Shows included contests, television series on washing hands with soap along with school based activities.

FIGURE 2. RESEARCH-BASED CAMPAIGN DEVELOPMENT PROCESS

Key findings	Design	Strategy
Children have little free time	• Few opportunities for contact outside of school and at home • Afterschool clubs, activities etc. are not offered	Focus on times when children can be reached—during school hours, and at night watching TV
Handwashing is already part of the curriculum but teachers have a heavy teaching load	• Curriculum development not required • Handwashing should be easy to teach	Provide teachers with tools to highlight HWWS during environmental sanitation extra-curricula activities, and make learning fun and interesting
Television is children's window to the world	• Use of mass media is appropriate • Popular children's television shows and publications are an opportunity	Place HWWS messages in channels targeting children e.g. "Goodnight Baby" TV show and "Youth" children's magazine
Children's key motivation for HWWS is preventing siblings from becoming ill	• Develop messages that emphasize the impact of the child's behavior on others, rather than him/herself	Position the HWWS campaign with the child as "the pride of the family"
Children value altruism, hard work and education	• The campaign should emphasize the rewards of helping family and community	Promote a superhero that, by washing hands with soap, acquires superpowers to help his family and others in his village
Grandmothers are cited as the person children they play with, most often	• Utilize grandparent's role as both caretakers but also playmates to help reinforce handwashing with soap messages for children	Revised interpersonal communication materials to include guidelines for grandparents on how to play handwashing with soap games with children

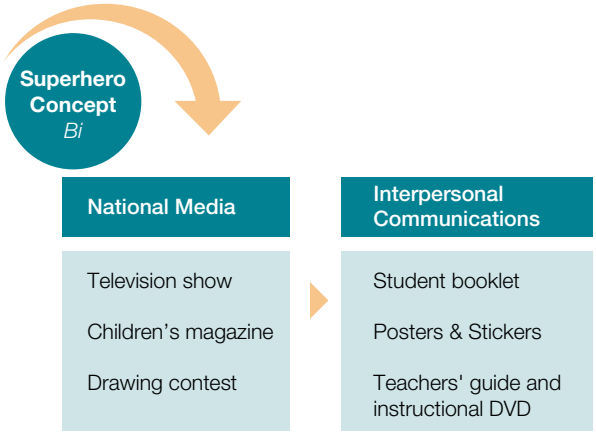
The notion of children as the pride of the family was the platform upon which the children's campaign was developed. Handwashing with soap was positioned as an easy, fun and smart behavior with a tagline of "Wash your hands with soap for your own health and the health of others around you." Two different concepts for the superhero were pre-tested and a final character, Bi, a rural schoolboy who becomes a superhero by washing his hands with soap to help his family and others—was selected. The Bi character was refined and pre-tested several times before final production. Promoting the two critical times for handwashing—before eating and after using the toilet—and the six steps of good handwashing practice were at the core of the campaign. These concepts were promoted in all school materials and media activities.

WSP supported the development of materials and training curriculums for teachers, and provided technical oversight in the development and implementation of all activities.

Components and Implementation

The superhero Bi was the starting point for developing the media materials. The relationship between that concept and national media and materials used in schools for interpersonal communication is shown in Figure 2.

FIGURE 3. RELATIONSHIP BETWEEN THE SUPERHERO CONCEPT AND PROMOTIONAL MEDIA



National Mass Media Materials and Events

The Bi concept and storyline were developed for use in national mass media activities. *Nhi Dong* (Youth) magazine—a national weekly children's magazine—printed Bi cartoon strips in ten consecutive editions. Based on the same story lines, the Bi cartoon strips were animated and aired on the national children's television show "Goodnight Baby" every Saturday night for ten weeks. Handwashing content was included as well. The interpersonal communication curriculum for schools, including the reproduction of the cartoon strips in student booklets, was developed on the basis of these national media materials.

Other national media events that attracted large participation were the national handwashing drawing contest (with 2,000 entries nationwide), promoted through *Nhi Dong* magazine, and Global Handwashing Day in which 1,000 schools in 2008 and 2009 participated, and which obtained local and national media coverage.

The iconic superhero Bi appears in teaching materials, posters, stickers, comic strips and animated cartoons.

Materials and resources for School-based Activities

School materials and teacher resources were developed as a set of reference materials. WSP prepared the technical materials while the advertising agency helped to develop games and visual materials for schools. Resources included:

- a teachers' guide to carrying out activities such as games, songs and competitions, and information about handwashing such as the critical times for handwashing with soap, and the six steps
- a "Wash your hands with soap for your own health and the health of those around you" poster
- a CD with instructions for teachers on how to play the games and implement the activities in existing lessons
- wall paper—a blank poster of Bi and school friends which could be adapted for individual school use, such as notices or games
- a student booklet—a guide to games, key information about handwashing, and 10 cartoons about Bi.[8] Generally, 10 or 20 booklets were given to each school—enough for one or two per class or a set for the school library.

The school materials used popular children's games, modified to promote handwashing in schools. They included "Five Clean Fingers", a song also used in the caretakers' handwashing with soap campaign. Consistent images and messages appeared throughout all materials, including stickers, and promotional items and materials developed later. The Bi character was easily recognizable in all materials as the champion of handwashing.

Knowledge and Skills

Program implementers and teachers in the pilot province and selected communes received training. Provincial level representatives of the Women's Union and the Department of Education and Training followed a two-day training course on how to impart knowledge about handwashing and introduce the activities to promote handwashing in schools. These master trainers then organized two-day training courses for 2-3 representatives from every primary school in the target area. About 30 school representatives in each course were introduced to the fundamentals of handwashing, the MoET-endorsed school materials and instructed on how to use them, and how to prepare a plan for follow up handwashing with soap promotional activities in school.

Children washing hands with soap using a homemade HW station (note the sticker from Bi programme on the HW station).

Primary school children learn about handwashing through fun and play. Here a group is playing "catch the dirty hand", one of the games from the school materials.

8 These cartoons are the same as those printed in the national magazine.

To overcome the schools' lack of handwashing facilities, during the training courses teachers and principals learned how to develop low-cost handwashing stations. Rather than wait for large-scale investments to improve their water and sanitation facilities, teachers, headmasters or parents associations could purchase plastic buckets and plastic water dippers, which were inexpensive and available everywhere in Vietnam. Teachers are advised to put soap bars inside loosely woven fabrics so the soap remained inside a container at all times and could be more easily managed.

After their training, teachers went back to their own schools and shared the ideas, experience and activities with other teachers. They then worked together to plan the implementation of handwashing with soap activities for the coming year.

Implementation

The Vietnam Women's Union, with support from WSP, led the project implementation. The Women's Union helped to organize the teacher training courses while WSP provided the materials for the training, the specialist trainer, and sets of school materials. The HWI also provided a list of activities that could be included in a school implementation plan for handwashing with soap, such as participation in the Global Handwashing Day; drawing contests; games; and wall paper contests, with two optional activities of a skit and additional games about handwashing and hygiene. Schools received a small budget to help them carry out planned activities within one school year. Each participating school carried out five extracurricular activities including entering the national handwashing with soap drawing contest.

Teachers found that the activities were very suitable for primary school children as they were easy, fun and interesting to do. Using the materials to guide them, and their training, teachers introduced in schools many activities to promote handwashing with soap, often integrating them in novel ways. For example, handwashing with soap was introduced into other subjects like citizen education, or included in routine school activities such as giving a talk or adding a game to Monday morning assembly. Some schools built on the positive behavior examples of the Young Pioneers Organization and included handwashing games and demonstrations in their meetings. Other schools organized special days for the environment and handwashing with soap that combined many games, competitions and demonstrations on handwashing with soap. Teachers adapted the Teacher Resource Guide's activity ideas to make skits and set up drawing contests, questions and answer quizzes, and mystery word puzzles. In class, some teachers read the cartoons aloud, adapted traditional games or songs to freshen the content of handwashing with soap instruction, or simply beat the school drum to remind children to wash their hands.

It makes a difference who attends the training. As well as the principal and Youth Union leader, Cho Gao Primary School in Tien Giang province also sent the school nurse (L) to handwashing with soap training. Now they work as a team to promote handwashing with soap in the school.

According to the school nurse:

"…Of course as a nurse I already knew about hygiene and the health aspects of washing hands with soap, but the training really helped to improve my communications skills. I now know how to convey messages to the children in a positive and interesting way. I didn't know this before...".

Integration and Scaling Up

Although the campaign component targeting school-aged children originated in seven provinces (where the mothers/caretakers program was implemented), through integration with other water supply and sanitation projects and World

Box 2: Hochiminh Young Pioneer Organization

The Young Pioneer organization was founded by the Community Party and Ho Chi Minh under the Communist Youth Party. Children aged 9-14 can join and take part in school and community activities. It is an organization for talented and dedicated Vietnamese youths patriotic who demonstrate solidarity, show discipline and good personal hygiene. Membership has status and leads into the Vietnam Youth Union for youths aged 15-30. In primary schools, Young Pioneers have daily tasks such as checking the homework of other students, checking for clean hands and nails, and encouraging orderliness such as lining up. They make ideal peer-to-peer communicators and role models for handwashing with soap.

Bank investment projects, the program has extended its coverage to 13 provinces—a much wider scale and audience than first expected.

Donors and NGOs were integrating the methodology and materials of HWI's schools program for handwashing with soap into their water supply and sanitation programs, including in major infrastructure projects. Several pilot provinces for the National Target Program for Rural Water Supply and Sanitation collaborated with WSP to promote handwashing with soap in primary schools, including through teacher training and support.

Historically, water and sanitation projects have paid little attention to hygiene promotion, avoiding in particular the area of school hygiene promotion. The specialist skills required to develop and deliver handwashing with soap in schools was usually not readily available in typical water and sanitation projects. By drawing on the HWI methodology, training program and materials, handwashing in schools was given much higher priority and emphasis than would otherwise have occurred.

Boxes 3 and 4 give examples of direct implementation through the HWI and integration into a water and sanitation program.

Box 3: Direct implementation in Tien Giang province

The VWU is implementing the HWI caretakers program and schools program in Tien Giang province. At the commune level, an Information, Education and Communications (IEC) committee, composed of four members: one from the Women's Union, one from the local Health Centre, one from the People's Committee (local government), and the principal of the local primary school, plans, coordinates and implements handwashing with soap awareness activities. The primary school principal works with teachers to organize and deliver handwashing with soap school activities, such as talks, games, quizzes, and demonstrations. The Women's Union and other members of the IEC committee help coordinate planning, attend events, and lend their support. An effective example of this joint implementation is Global Handwashing Day. The Provincial Women's Union advises and mentors some 90 IEC committees in the province to promote handwashing with soap, including in primary schools.

Box 4: Integrated implementation on the World Bank's Red River Project

The World Bank's Red River Delta Water Supply and Sanitation Project include a hygiene awareness component. In Thai Binh province, implementation of this component was contracted out to a local company, Infrastructure Thanh Long. The company had intended to develop a picture set to use when talking to schoolchildren about personal hygiene but did not have the resources or specialist staff to do formative research and prepare quality and effective materials for schools. Instead, the project in Thai Binh now uses the materials, methodology, and training developed by WSP, to support handwashing with soap in schools in 30 project communes. The project supports funding for implementation while WSP provides technical assistance. The company shares experiences and ideas between schools in the project and monitors the handwashing with soap program.

II. Peru

Background

PERU COUNTRY DATA	
Area:	1,285,216 km2
Population:	29.9 million (2010)
Administrative regions:	25 regions and Lima province
Children aged 0-14 years:	29.1%
Under 5 mortality:	24 per 1000 (2008)
Education expenditure:	2.7% GDP (2008)
Primary school enrolment:	96%

Source: CIA World Factbook, 2009
UNICEF Peru at a Glance

Country Information

Peru is a multi-ethnic, diverse society with a mixture of cultural traditions. Although the main language is Spanish, Quechua and Aymara are spoken in the Andean region, and the Amazonian ethnic population speaks varied dialects. Geographically, the country is divided into the arid plains of the Pacific coast, the peaks of the Andes, and the tropical jungle of the Amazon Basin. These geographical divisions created environmental and cultural diversity, which, added to a still deficient infrastructure network, made communication efforts challenging. Peru is a highly decentralized society, divided into 25 regions and the Callao (port in Lima) constitutional province. Peru is also becoming an urban country with close to 72 percent of its population living in or around cities. According to the Constitution, initial, primary, and secondary education is free and mandatory in Peru.

The Importance of Handwashing

In Peru, diarrhea is one of the main causes of disease and death in children under five. Children typically have 5 to 10 episodes of diarrhea per year, each lasting up to four days. Children living in rural areas of the jungle and the Andes and whose mothers have a low level of education are the most affected. Diarrhea aggravates infant malnutrition and remains one of the main causes of mortality from dehydration.

Despite the health education efforts coordinated between the Education and Health Ministries, the country still faced difficulties because segments of the population live in remote areas without access to basic services such as water, sanitation and health. Health promoters and teachers in these areas were isolated and must commuted several hours once or twice a month to report on their progress, and did not have easy access to training and educational material. Even though living conditions in poor urban settings were modest, families' access to public services[9] was improving. Schools and health centers were closer to the neighborhoods, and the availability of potable water and sanitation was expanding.

Handwashing with Soap Program, its History, Components and Partners

The History of the Handwashing Initiative (HWI)

In 2003, a national multisectoral HWI was created in Peru to increase handwashing with soap among mothers and children of the poorest segments of the population. The early years of the HWI focused on laying groundwork, including a formative research study of households in 2004;[10] the creation of a consultative committee led by the Ministry of Health; and a national decree formalizing the HWI. The Ministries of Education, Health, Housing and Sanitation, the National Program for Direct Support to the Poorest Population (JUNTOS), regional and local governments, and private enterprise became involved in 2006 and have integrated the HWI methodologies and tools into their programs. WSP has coordinated the HWI since its inception.

The HWI in Peru was implemented in two phases. The first (2005-2006) covered 14 regions. The Health Ministry headed this phase and a ministerial resolution institutionalized the HWI methodology. During this phase, health professionals, teachers and community promoters were trained on communication for behavioral change, using a methodology developed to effectively target women and children.

In the second phase (2007-2010), the program was redesigned to measure its impact on health and learn from the process. Covering 24 of the 25 regions, the HWI aimed to reach schools and communities in peri-urban and rural areas in the country's three different geographic areas.

The Overall Program

In Peru, the HWI's "School and Community" project was implemented in 788 randomly selected districts in the 24 regions. Its objective was to stimulate and sustain change in the handwashing behavior of 1.3 million women and children.

9 Access to potable water in urban areas is 90 percent and access to sanitation is 81 percent, while in rural areas 61 percent of the population has access to water and 36 percent to sanitation.

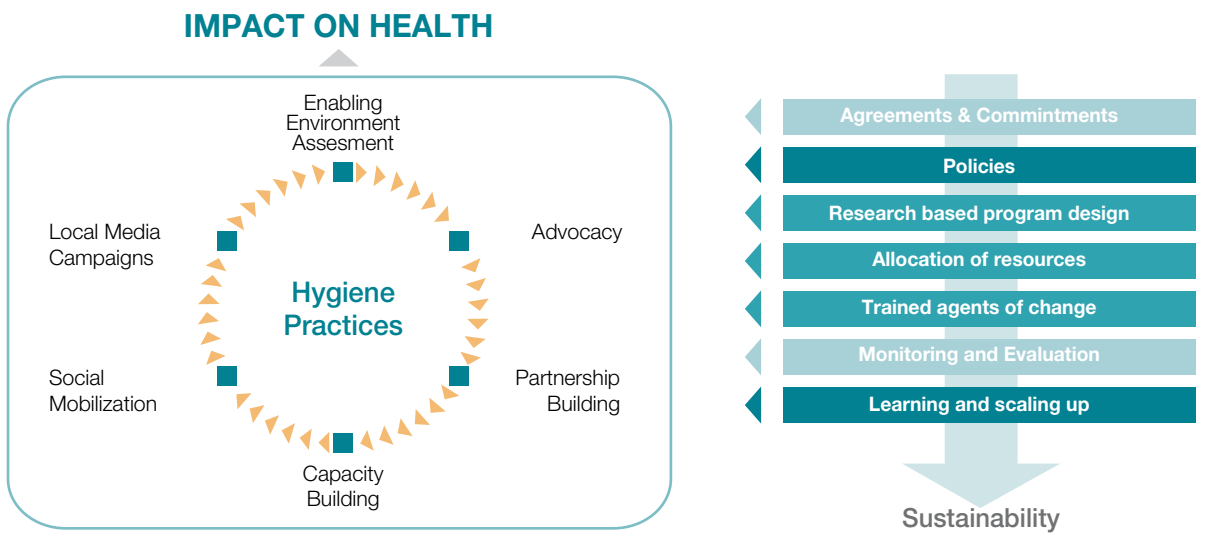
10 Prisma, 2004, Behavioral Study of Handwashing with Soap in Peri-urban and Rural Areas of Peru. This study focused on handwashing with soap in the household, and some interviews with schoolchildren. It did not specifically nor systematically focus on primary school children's knowledge attitude and practice.

The approach was based on the assumption that sustained hygiene-related behavioral change occurs when community leaders and authorities endorse it, by when it is integrated into health protocols and education curricula, and when its impact on health is evident. Sustained behavior change is the result of systematic and lasting multi-channel communication efforts that use a varied network of well-trained agents, interpersonal methods and direct consumer contact events and mass media. The following graph describes the components of the HWI methodology.

"School and Community" comprises several activities meant to achieve an integral and sustainable change at the community level. It targets women aged 14 to 49 and children aged five to 12, and engages multiple actors in the community over a period of time; these actors participate and become agents of change. The specific activities include:

i Institutional development to ensure sustainability, including advocacy, partnership building, and capacity strengthening;
ii Planning and budget allocation done at national and local level with public, private and community based organizations;
iii A communications campaign through local media and promotional events (street parades, local theaters, etc.) focused on the school and community;
iv Training of community actors and agents of change (such as teachers, medical professionals, community leaders), and provision of educational handwashing sessions for mothers and children.

FIGURE 4. IMPACT OF HYGIENE PROMOTION PROGRAMS ON HEALTH



Handwashing with Soap in Schools

Safe, Clean and Healthy Schools

The Ministry of Education and WSP designed a plan to integrate the methodologies and tools developed by the HWI into the recently-established Environmental Education Division of the Ministry of Education. The idea was to adapt HWI's "School and Community" approach to the Ministry of Education's "Social Mobilization: Safe, Clean and Healthy Schools" national program. This jointly developed component sought to promote handwashing with soap among primary school children by means of trained and motivated teachers using tools and technologies developed to motivate children and their families to adopt good handwashing with soap behavior. In that context, the child was considered an agent of change or a link with the family. He/she should bring home new ideas to promote the behavior among the other family members. The main objective of the HWI methodology was to foster a change in schoolchildren's behavior in handwashing and general hygiene habits by promoting washing hands with soap before eating and after using the toilet.

An operational plan was designed to reach 3,000 schools nationwide. By 2010, 12,000 teachers had been trained and used HWI tools to reach and motivate children in the classroom.

Formative Research

With funding from the Bill and Melinda Gates Foundation, in 2008 WSP conducted research on schoolchildren aged 5 to 12 to provide insights into their day-to-day reality, aspirations and attitudes towards hygiene. This research was necessary to learn about children's perception of their role as agents of change at school, home and the general community. Previous formative research in 2004 did not focus in detail on primary school children.

The formative research on children's handwashing behavior targeted six school settings, situated in urban and rural areas in the coast, the highlands and the rainforest. Several child-friendly and fun research exercises, such as drawings, were carried out in each school and activities also took place in the homes to understand the home situation and the interaction between mothers and their children (see Box 6). Research concentrated on the family; the child; cleanliness; the school; and handwashing practices.

BOX 6: TOOLS FOR RESEARCHING CHILDREN'S HANDWASHING BEHAVIOR—PERU

Research Tool	Why was it used?	How was it used?
Home observations	To understand the interactions between mothers and their children and handwashing practice at home.	Structured observation at children's homes.
Caretaker interviews	To understand constraints to handwashing with soap, caretakers' attitudes and beliefs	In-depth interviews of caretakers at home after observation.
Focus groups with children	To understand children's aspirations, attitudes and knowledge by age.	Focus group discussions with groups of girls and boys from 5 to 7 years; two from 8 to 10 years and two of 11-12 years divided by sex.
Focus groups with caretakers	To understand caretakers' attitudes, knowledge and constraints to washing hands with soap.	Focus group discussions with caretakers divided by age: up to 35 years of age; and 35 years and above.
School staff interviews	To understand the school's social environment and management system.	In-depth interviews with teachers, the principal, and support personnel.
School workshops	To determine children's motivations for handwashing.	Workshops for children in two classrooms by age.
Structured observations at school	To understand the actual behaviour of children and their interaction with their peers.	Observation linked to the motivational workshop.

Research Findings

A key finding from the school research was that, together, mothers, children, and teachers formed a critical information pathway for conveying hygiene messages. Communication patterns differed according to geographical areas: horizontal and open in the coast and rainforest, and vertical in the Andean region. In the first case, children communicated information, offered opinions freely and received feedback. In this setting, children became agents of change. In the second case, children became messengers, channeling information from school that was valuable to the mothers. Even in this case, the role of the child was important, because mothers needed to be updated on the news and information that came from the teacher, one of the most influential and respected persons in the community. That finding supported the HWI's hypothesis that children were a key channel and potential agents of change in the household.

The character of the family had a strong influence on children. For example, in the Andean region communication within the family was vertical: children may bring relevant information to their mothers, but they will not engage in discussions about the benefits of handwashing. The opposite was true among children in the coastal or Amazonian regions. Usually children trusted their mothers the most, although grandmothers were important, especially in rural areas. Grandmothers played a role of confidants and caretakers of the smallest children. Brothers and sisters were frequently caretakers of smaller siblings, playing with them and teaching them, while fathers were often absent and not expected to participate actively in their children's lives.

When asked about their future during focus group sessions, children thought about being professionals (doctors, lawyers or professors) in order to help other people (social motivation) or, according to the youngest children, simply to help their own families. One relevant finding about children's strongest

motivation was their aspiration to protect their families from poverty and disunity, and their willingness to take action.

Children knew that they need to wash their hands even when they did not seem dirty, and were aware of the critical times for handwashing and the need to use soap. However, that knowledge did not always translate into practice. They forgot about handwashing especially if they were playing with school friends, and did not use soap because it was not available at school or at home. Water was not always available for handwashing, as schools usually had water sporadically throughout the whole day. Children did not know about the importance of using running water when washing hands and sometimes washing hands was more playing than washing. If toilets were saturated or dirty, children did not bother to wash their hands after defecating.

Teachers were admired (mainly by smaller children) or feared. Teachers thought it was difficult to inculcate habits in children because of their home situation and tended to concentrate on theoretical aspects of handwashing and hygiene. The level of priority given to handwashing was very dependent on individual teachers.

Intervention

Children benefitting from the program were expected to become agents of change among their peers, in their families and the community where they live. The program aimed to involve the family and the community in generating a culture of hygiene.

The main contributions of the HWI to handwashing with soap promotion in the school system were:

- Methodology and manuals for teachers' capacity building. The Ministry of Education delivered certificates that upgraded teachers' performance and earnings as an official recognition of this capacity building;
- Promotional products and games to use in the classroom;
- Development of a handwashing soap device called Super Jaboncin. This highly appreciated plastic device was used to set water and artisanal liquid soap by the school toilet.

The Ministry of Education's mainstreaming the handwashing with soap methodology gave the expansion of handwashing with soap in primary schools across the country its biggest impetus. The health education component of the "Healthy, Safe and Clean Schools Program" uses handwashing with soap as a key indicator and this is formalized through Ministerial resolutions and national guidelines. The Ministry made the methodology and use of tools developed for handwashing promotion an official priority throughout the education system. The Ministry promoted application of the methodology, capacity-building and certification, and training in the participating schools.

Capacity building

The methodology to promote behavioral change was designed based on research. It consists of a route that is followed by trained teachers to captivate and motivate the target audience to adopt the behavior. This route is sequential, logical and flexible and has three stages covering:

1 Child motivation—working with those who motivate handwashing practice in children, such as individuals, groups and families, and the public;
2 Ensuring water and soap availability in the area where children wash;
3 Applied knowledge, i.e. the child gets to know when they must wash their hands—after using the toilet and before eating, and how they must wash.

Training of Trainers

Trained teachers committed to spreading the methodology among fellow teachers at school. They either shared additional manuals and promotional materials or photocopy them. Trained teachers became advocates of hygiene and influenced school principals to allocate funds to fix bathrooms.

Social Mobilization within the School and in the Community

Teachers were trained to develop an annual plan games and activities to be carried out in the school during the year. Families were invited to join the organization and participate in the event. As the program was linked to the local government's program, promotional events and parades were frequently organized in the community with massive school participation.

Reporting and Monitoring

Teachers must report monthly to the district education unit (UGEL, see below) on whether or not they are on track with the plan. At the end of the reporting period, the UGEL awarded the teacher and/or the school for performance and results.

Components and Implementation

Setting up the System

WSP spent time working with the central Ministry of Education to prepare an operational plan for rolling out the program on a wide scale. This meant identifying how the program would be spread locally, and supporting the process.

The program implementation took into account Peru's decentralized nature. At the national level the Ministry of Education formulates education policy, and at the regional level the education authorities have a management function and provide the budget and direction for education in their region. Below the regional level, local educational units (UGELs) have frequent direct contact and involvement with schools in their area. For example, teachers report to their local educational unit every month. It is this local education unit that is the critical link to implement the HWI.

BOX 7: Participants in schools hand program

- Ministry of Education, through the Community and Environmental Education Department
- The World Bank Water and Sanitation for Latin America Program, through the Handwashing Initiative (HWI)
- Regional education departments
- Local education authorities (UGELs)
- Elementary and primary schools
- School Environment Committee
- Teachers
- Students

As evidence of the Ministry's endorsement, assigned staff travelled to each region to talk to regional education directors and local education units about the program and motivate them to participate. Furthermore, they revised and validated the behavioral change methodologies for handwashing; developed guidelines for teachers' certification; established monitoring indicators, and developed policy at national and local level to uphold the program. The Community and Environmental Education Department of the Ministry of Education issues regulations for the program and evaluates it nationwide.

Local education units advertise participation in the HWI program to schools, then support and motivate schools and teachers directly. They also monitor and certify the school's participation in the program.

Schools wishing to participate apply through their local education unit. They commit to undertaking certain activities in exchange for training and support. As well as handwashing promotional activities in their own schools, they also must carry out some activities in the community, which they need to plan and coordinate with local municipalities. The community obligation aspect of the handwashing component helps to build closer relationships between schools, communities, and local administration. It also normalizes handwashing at school and in the community. Schools evaluate the program achievements and guarantee an honest and transparent evaluation.

BOX 8: Lessons from a teacher

Mario Diaz Estela is a 44-year-old teacher at the Chontali School No. 16107, in Jaen, Cajamarca Region. The school is one of six that has implemented awareness activities in coordination with the Jaen UGEL, supervised by the Cajamarca Regional Education Department.

"…It was very interesting to participate in the program and to help build people's capacities for washing their hands with soap and running water. I was chosen to teach the trainers in several locations.

Now I have a commitment to handwashing with soap and have taken on roles and responsibilities as a teacher. The training has helped me improve learning in the educational community and I have been able to address thematic areas together with the health sector. I have also been able to strengthen personal and community hygiene habits.

For students, there has been less diarrhea and chronic malnutrition. Students' learning capacity has improved and they are organized now to cope with disease together".

Knowledge and Skills

A cascading mechanism is used to provide the skills for bringing about behavior change in schools and the community. Four facilitating agencies were contracted and six regional coordinators recruited to support and oversee activities in the HWI program regions. People from these agencies and the regional coordinators received intensive training from WSP to become expert facilitators and replicators. They trained master trainers, who, in turn trained front-line workers such as teachers and health workers.

Teachers received training that enabled them to share their knowledge with other teachers, hold educational sessions at school, and organize social mobilization activities to involve the school in improving hygiene and creating a lasting culture. As part of the training, teachers received a manual on the methodology to use in class. Following the training, teachers returned to their schools and carried out educational activities and mobilization to promote handwashing with soap. District-level education sector staff coordinated, organized and monitored the training events and school activities. Teachers who participated in the training and applied handwashing with soap promotion successfully received a certificate from the Ministry.

Community and Parent Engagement

The School Environment Committee is the key organization for planning and integrating handwashing with soap within the school. Composed of the school principal, teachers, a municipal councilor, members of the student council and the parents' association, the Committee prepares an action plan, implements it, evaluates results and sends a report to the local education authority.

Parents played an important role in the handwashing program. Parents' associations are very strong in Peru and they have a clear role on the School Environment Committee. Parents were asked to give soap to their children to bring to school. The handwashing program demonstrably promoted closer relations between parents and schools. According to a recent study in intervention areas, 70 percent of caregivers surveyed contributed to school campaigns by donating time, materials or money.[11] Caregivers living in the jungle or the mountains of Peru tended to collaborate the most with schools, to promote better personal hygiene, not only by participating more in school activities but also by contributing more to school-organized health campaigns. Almost 75 per cent of them sent soap to the school. Not only was the program making schoolchildren agents of change at home, but parents and caregivers were entering the school and joining in on handwashing with soap activities.

Incentives and Rewards

The HWI utilized an important rewards and recognition system for schools and teachers. Not only did schools benefit from capacity building, support and materials, they also obtained official recognition of their participation. If a school actively promotes handwashing it may receive an award from the Ministry of Education. As part of its monitoring tasks, the local education unit could validate the school's performance.

Teachers who had completed the training and show effective application were eligible for certification by the Ministry of Education. This certification recognized the improvement in teachers' professional aptitude and lead to better jobs in the educational system and higher earnings in the medium term. Certification also served to reinforce teachers' the motivation and make behavior change more sustainable. The local education unit provided a list of teachers for certification to the Ministry.

Regulations and Local Agreements

National resolutions cemented the integration of the HWI into the Ministry of Education's "Safe, Clean and Healthy Schools Program". Other Ministerial resolutions permitted civil society to participate in promoting the "Healthy, Safe and Clean Schools" program, using the HWI behavior-changing methodology.

11 WSP, Impact Evaluation Baseline Survey in Peru, August 2010

In over 50 percent of the regions where the program was implemented, a regional or a local government agreement already existed, or a regulation was being formulated to include the promotion of handwashing in schools as a priority. Schools in these regions designed handwashing activities in the curriculum, using materials, awareness raising and social mobilization. Children took an active part in recreational workshops where they were taught about the benefits of washing their hands.

Complementary Campaigns

Mass media campaigns, direct consumer contact and interpersonal communication with mothers complemented the school education methodology. The communications concept for mass media and direct consumer contact featured a superhero named Super Jaboncin (SJ) ("Super Soapy") who gained the power to fight germs by adding soap to water.

Schoolchildren identified with SJ through mass media (radio spots) and direct consumer contact events. These events included fairs with many activities taking place at the same time, including games for children, live theater, and kiosks where demonstrations and advice on where to place soap and how to set up a handwashing station could be shared with mothers. Implementers were supplied with a kit that included an SJ superhero costume; three games with large props to engage audience participation; materials to give out to the audience such as posters and comic strips featuring the SJ superhero; and a guide on how to use the kit materials and conduct an event.

This kit-based approach allowed for some standardization across regions and events, and ensured integration and synergy with the mass media component. It also increased the likelihood that teams delivering the events stayed "on message." Regional coordinators, facilitating agencies, and partners monitored these events.

Superhero Super Jaboncin (Super Soapy) fights germs with soap. Many live theater events with Super Soapy, in primary schools, were made.

Solving the Soap Problem

Although parents were asked to give soap to their child's school, they did not always do so. Sometimes, soap was stolen. The remedy for some schools was to put soap in a mesh bag attached to the tap so that it was always available and used carefully.

A private company, DURAPLAST, designed a dispenser for water and liquid household soap to promote handwashing at school and at home. The idea for the dispenser originated from mothers' feedback about the need for a water dispenser to make washing hands convenient. WSP developed the idea to mix water and liquid soap in a dispenser, which it then trialed for six months in homes and schools in three regions. Following some minor modifications, WSP funded the initial manufacture of the device, and later the Ministry of Women and other organizations funded extra production. WSP prepared an accompanying 3-step chart about the device—what the device is, where to put it, how to use it, as well as how long it will last.

A handwashing device helps to ensure soap is always available in school.

Schools with the handwashing device invited mothers to come to the schools to learn how to make the device. Children and mothers made an active contribution with suggestions for the dispenser and how to care for it. Health officers undertaking routine household visits checking on family nutrition followed up on the device—its use and durability. A recent study of 3,600 households found that in the households where there was a place for handwashing with soap, there were 17 percent fewer worms in the children's stools.[12] Evaluation of the device in schools has yet to be carried out.

Integration and Scaling Up

Integration between health and education staff was evident at the local level. The "Health Promotion in Schools" Program (Healthy Schools) of the Ministry of Health has been in effect since 2003 and has supported handwashing as a priority issue. At the national level, the Ministry of Health was only marginally involved with the Ministry of Education's "Safe, Clean and Healthy Schools" Program, but health personnel in the field were active and visited schools and assisted with the planning and implementation of activities.

HWI in schools was integrated into complementary programs by:

- the National Program for Rural Basic Sanitation (PRONASAR), run by the Ministry of Housing, Construction and Sanitation. The HWI is part of a Joint Plan of Action for promoting handwashing in the intervention pilot areas, which includes investing in schools;
- the JUNTOS Program and CRECER strategy, which consists of multi-sector programs coordinated by the Prime Minister's Office with the aim of reducing the rate of chronic malnutrition. Handwashing with soap is included as an important action towards reducing malnutrition.

12 IMASEN, Baseline Study of Handwashing, Peru, 2009

- regional and local governments. The HWI methodology has become an integral part of regional policies in five regions, which implies additional funding for hygiene promotion processes.
- The Ministry of Women and Social Development that has adapted and integrated the HWI approach, methodology and tools into two of its national programs: Wawa Wasi and PRONAA. Wawa Wasi is the national nursery program that provides, care, stimulation and nutrition to children up to four years. The HWI has strengthened the reach to the child's home, providing an added value that enhances results. PRONAA is a large national program that works with communities, households and schools in 1,880 districts of the country to decrease malnutrition by educating and promoting nutrition and healthy habits. It also provides feeding in schools and community-based organizations.

With the integration of handwashing with soap in the school education program, and active support from local education departments, more than 3,000 schools in 24 regions have taken part and as many as 300,000 students have benefited by the program. To date, around 15,000 teachers have been trained in handwashing promotion. In just three years, this is a remarkable achievement.

During 2010, major public and private partners joined the action to promote handwashing in Peru, including the Ministry of Women. Also, agricultural (north) and mining companies (south) were funding capacity-building workshops for change agents, and the purchase of soap dispensers to be placed at schools and homes.

Summary of Country Approaches

Vietnam and Peru's approaches to school handwashing programs were different. The following table summarizes each country program:

Criteria	Vietnam	Peru
Main target audience	Schoolchildren aged 6-10	Schoolchildren aged 5-12
Implementation level	Provincial	National
Service delivery model	Vietnam Women's Union, provincial education departments	Ministry of Education, Ministry of Women and Social Development; Regional and local governments; mining, agriculture, plastic, private firms
Role of private/non government sector	Professional services provided under contract	Support for local schools Funding for training activities Funding for HW soap device Monitoring process
Research methods	Child-friendly research activities for students; teacher interviews; home visits; school sanitation inspection	Games with children; home visits; interviews and focus groups with teachers and mothers
Communication activities	Integrated entertainment education comprising games, songs and other activities in schools, national drawing competition, TV cartoons, newspapers	Entertainment education integrating games and activities in school, street theatre, radio programs and soap operas, parades and promotional events
Protagonist for handwashing	Bi, a schoolboy who gets special powers by handwashing with soap in order to help his family and others	Super Jaboncin ("Super Soapy"), who gains the power to fight germs by adding soap to water
Main messages	"Wash your hands with soap for your own health and the health of others around you"	"The soap gives you power, don't forget you must wash with it" "Share the power of soap, tell your mom to use it for HW before cooking"
Integration	Examples of training, methodology, materials, or coordination integrated into: 1 Water and sanitation projects 2 Provincial education department 3 National Target Program for Rural Water and Sanitation 4 Women's Union IEC committees	Capacity-building methodology and tools, as well as HW soap device integrated into: 1 A national guide for teachers in environmental education (Ministry of Education) 2 National nutrition programs (Ministry of Women and Social Dev.) 3 Regional nutrition policies
Sustainability/ Carrying it forward	1 Provincial Education Department includes handwashing with soap training in budget. 2 Provincial Governments investment programs include HWI in schools	1 National Budget includes funding HWI within the Nutrition Program 2 Regional Governments investments projects include HWI 3 Private firms implement HWI in 2011 (after project ending)
Reach	15 of 64 provinces	24 of 25 regions

Lessons Learned

Both country case studies on handwashing with soap for primary school children provided important lessons for future work in Vietnam and Peru. This section provides insights that may be useful for other countries that wish to implement effective handwashing with soap campaigns for primary school children at any scale.

Child-appropriate formative research tools reveal insights for effective programs

The research methods and tools WSP used to investigate schoolchildren were produced to elicit the critical information needed to develop campaigns that would resonate with children and provide insight into their personal hygiene behaviors, knowledge and aspirations. This evidence-based approach avoids making assumptions about what motivates children and what prevents them from washing their hands; it shapes the direction and style of the behavior change campaigns targeted to children.

Focus on fun

School handwashing with soap materials with contents that focus on fun and not just education or health benefits are easier for teachers to use and more interesting for children. Many programs focus on the effect of handwashing with soap on the individual's health, but both Vietnamese and Peruvian children already understood the need to wash hands and the relationship between germs and disease. The main problem was that they often forgot or did not bother to wash hands. Fun ways to overcome the barriers to handwashing—the belief that handwashing with soap is not important, the lack of peer and adult role models, and the lack of water and soap—are more effective at producing lasting behavior change than those focused on health alone.

Children as agents of change

In Vietnam, children are obedient and submissive with their parents; they may share information but not attempt to engage in discussions or freely express an opinion. On the other hand, they correct their siblings and remind them to handwash with soap. This occurs also in the Andean regions of Peru, where communication between parents and children is quite vertical. A total opposite is true of the coastal and Amazonian regions in this country, where children take action and are talkative, and therefore become agents of change.

Capacity building is critical

Skills-based training for teachers and education staff on how to communicate handwashing with soap in schools using child-friendly communications skills has triggered greater attention and priority to handwashing in schools. In Vietnam, teachers appreciated having this new set of skills. Practical training included site visits to selected schools so teachers could see realistic situations and good models for handwashing with soap. In Peru, teacher training and capacity building were institutionalized through national capacity-building policy and a certification system for teachers. Certification provides financial and status incentives for teachers and helps build sustainability for handwashing with soap through the continued commitment of teachers.

Link schools with home and the community

Schools are not islands. There are opportunities for interaction between family and the broader community to support and reinforce programs for change in handwashing with soap behavior initiated in schools. For example, in Vietnam and Peru grandparents were part of the program because grandparents (especially grandmothers) spent a lot of time caring for children and mothers were not always the most significant adult influence at home. In Peru, the HWI had very strong links to the local government programs and community events. Parents were encouraged to enter the school environment to learn about handwashing. Women were trained at their community organizations to support the ongoing process at their children schools.

The media can serve as a bridge between schools and community

An integrated media program can be a bridge between schools and the larger community; this is an important aspect of the social ecological perspective. In the case of Vietnam, the same messages on handwashing that were emphasized in schools were reinforced through television and the Youth magazine, taking the program beyond the schools and into the homes each evening.

Accommodate innovation and flexibility in handwashing with soap programs

Teachers have shown that they can be adaptable and creative when teaching about handwashing with soap, provided that they are given the skills to apply new teaching methods and materials such as a teacher's guide or manual. Training of teachers should focus on building communication skills to overcome the rigidity of the curriculum and to give teachers the skills to be flexible and responsive to the different conditions in their schools.

School commitment is greater if participation is on a demand basis

Formal commitment from schools participating in HWIs increases their application of the training and completion of the handwashing with soap plan for the school. Ample time is needed and support given to assist schools to prepare their implementation plan. In Peru, most schools in remote areas, mainly in the Andes, lack access to appropriate water and sanitation facilities. They may have bathrooms but receive water only a couple of hours a day. In most cases water is distributed by track and stored in cisterns. Teachers are used to organizing healthy corners with water dispensers kept within the classrooms. *Super Jaboncin* was greatly valued because of its cost effectiveness because it saving soap by 60 percent[13] and also assigned water for use in handwashing.

Strong leadership and political will are effective in scaling up handwashing practices

In Vietnam's hierarchical society, a very motivated and supportive leader, whether they be the provincial director of education, a primary school principal, or a member of the provincial Women's Union, can significantly multiply the program's achievements. For example, introducing handwashing with soap activities in schools is most effective if the principal (and Pioneer Team Leader) attends the handwashing with soap training. It is easier and quicker for them to introduce the ideas from the training, especially since the principal has influence over the school management board, teachers, students and parents. In Peru, at the national level, the Ministry of Education has demonstrated strong commitment to the HWI program by delegating staff, contributing to the program's technical development, enacting regulations, and communicating and supporting the process at all education levels. The level of results achieved to date would not have been possible without the political will of the Ministry of Education. An example of the power of this commitment is a 2010 guideline on environmental education for teachers: "Peru, Wonderful Country", which includes a chapter on hygiene dedicated mainly to the promotion of handwashing with soap, and the "educational route" developed by the HWI.

Handwashing with soap can influence other projects

Increasing the impact of handwashing on other projects and locations is possible when WSP has professionally researched, prepared, and trialed the package of training and materials. In Vietnam, water and sanitation projects lack the specialist skills for this work. Influencing is more successful if discussions about value-adding take place early in the project cycle so that handwashing with soap can be included in project plans and budgets.

13 Reported by the Ministry of Women and Social Development.

Conclusion

This document has presented two different case studies on increasing handwashing with soap practice by primary school children. Both the Vietnam and Peru programs took place mainly in the primary school setting. The case studies found that formative research on the behavior, beliefs and influences of primary school children is critical for effective behavior change campaigns targeting children. Teachers are also important advocates for handwashing with soap but they need the skills, materials and methodologies to implement handwashing with soap programs in their schools.

Beyond the school's immediate setting, the significance of cultural and contextual factors increased. The degree to which children were agents of change within their families and communities was based on local culture and customs. In Peru, children were important conveyers of messages to the home and they influenced family behavior, while in Vietnam, children's opinions did not influence adults. In both countries, children were most likely to influence their siblings.

The mainstreaming and scaling up of a handwashing with soap program for schoolchildren depended on leadership, policy and institutional setting. Implementing primary school handwashing with soap programs on a national scale required institutional commitment. In Peru, the Ministry of Education was quick to mainstream the program through its national curriculum and policy development, and its regulations. In Vietnam, the Ministry of Education and Training was not ready to take those steps. The program approach was therefore more informal, focusing on extracurricular activities to support the existing curriculum and on collaboration with water and sanitation projects.

Regardless of the approach taken, both country case studies demonstrate that getting more children to wash their hands with soap is achievable.

wsp
water and
sanitation program

THE WORLD BANK